

Impacts to Prime Hook National Wildlife Refuge from Hurricane Sandy November, 2012

On October 28 and 29, Hurricane Sandy dealt a blow to many Atlantic coastal communities, including residents of Prime Hook, Del., and to Prime Hook National Wildlife Refuge (NWR).

- The storm caused significant flooding in the Prime Hook Beach community.
- It also significantly widened a breach in the dune line of Unit II of Prime Hook NWR.

The U.S. Fish and Wildlife Service (Service) understands that flooding is a hardship for many Prime Hook residents.

- Like so many coastal areas, Delaware is dealing with increased flooding and coastal erosion along its shoreline.
- In coastal Delaware, sea level has risen more than 13 inches in the last century. Over the past 64 years, the beach at Prime Hook has receded about 500 feet.
- The manmade freshwater marshes of Prime Hook NWR are being overtaken by sea level rise and intense coastal storms. Since 2006, intense storms have breached the dune line at Prime Hook many times. What was a 4,000-acre network of managed, freshwater impoundments five years ago is transforming into a shallow, open sea water system.
- Significant storms like Hurricane Sandy cause serious flooding, and there is no action that can be taken by the Service that will prevent all flooding.

The Service and the state of Delaware have attempted to repair the south breach in Unit II, and address the flooding at Prime Hook, but these repairs have been short-lived.

- The last repair occurred in October, 2011 and lasted only a few days.
- In addition to trying to fix the breach, the Service has worked with DNREC and Delaware Department of Transportation (DelDOT) to find other short-term measures to address Prime Hook flooding. We are working with DelDOT to conduct engineering on larger culverts under the road and on water control structures. We have also collectively assessed the feasibility of raising Fowler Beach Road, but have determined that this isn't a feasible option.
- Any actions undertaken by the Service, DNREC, or others will not prevent flooding during these extreme weather events.

Finalizing the comprehensive conservation plan (CCP) for Prime Hook NWR is not holding up efforts to repair the dunes. Rather, there is simply not enough sand on-site to do the work.

- We must bring sand from offshore to restore the site and that will require a significant dredging effort and sufficient resources to complete the project.
- If there was enough sand onsite, the Service and DNREC would have tried to repair the dunes again.
- We exhausted the sand supply in October, 2011 when we tried to repair the dunes.
- Repairing the dunes will not eliminate future flooding of Prime Hook Road during extreme high tides and storm events, since floodwaters enter the road through locations other than the breaches.

The Service continues to expedite the CCP to guide the long term management of the refuge. We are listening to the concerns of residents and we care about the hardship caused by Hurricane Sandy, and other more frequent coastal storms.